Amendments to the Claims:

This listing of the claims will replace all prior versions and listings of claims in this application.

Listing of Claims:

1. (currently amended) A method~~Method~~ for establishing a light beam with substantially constant luminous intensity, comprising the steps of:

[[-]]establishing a light beam by means of a light source; and

[[-]]controlling an attenuation of said light beam on the basis of occurrences of luminous intensity peaks in said light beam[[.]]; and wherein

said controlling an attenuation step comprises applying a first level of attenuation to said light bam at times where the luminous intensity of said light beam assumes a magnitude of an intensity floor and applying a further level of attenuation to the said light beam at times where luminous intensity peaks occur; and

said further level of attenuation step is proportioned to the magnitude differences between said luminous intensity peaks and said luminous intensity floor.

2. (currently amended) A method~~Method~~ for establishing a light beam according to claim 1, wherein~~whereby~~ said luminous intensity peaks occur periodically.

3. (currently amended) A method~~Method~~ for establishing a light beam according to claim 1, wherein ~~whereby~~ said luminous intensity peaks may at least within a particular time interval be considered of substantially equal magnitude.

4. (currently amended) A method~~Method~~ for establishing a light beam according to claim 3, wherein ~~whereby~~ said particular time interval is at least 50 hours.

5-6 (canceled)

7. (currently amended) A method~~Method~~ for establishing a light beam according to claim 1, wherein ~~whereby~~ said attenuation is achieved by ~~means of~~ a variable attenuation device~~means~~.

8. (currently amended) A method~~Method~~ for establishing a light beam according to claim 7, wherein ~~whereby~~ said variable attenuation device~~means~~ is capable of applying at least two different levels of attenuation to said light beam.

9. (currently amended) A method~~Method~~ for establishing a light beam according to claim 8, wherein ~~whereby~~ one of said at least two different levels of attenuation represents substantially no attenuation.

10. (currently amended) A method~~Method~~ for establishing a light beam according to claim 9, wherein ~~whereby~~ an attenuation control device~~means~~ is coupled to said variable attenuation device~~means~~.

11. (currently amended) A method~~Method~~ for establishing a light beam according to claim 10, wherein ~~whereby~~ said attenuation control device~~means~~ controls which of said at least two different levels of attenuation that is applied to said light beam by ~~means of~~ an attenuation control signal.

12. (currently amended) A method~~Method~~ for establishing a light beam according to claim 11, wherein ~~whereby~~ said attenuation control device~~means~~ is coupled to a lamp driver that drives said light source.

13. (currently amended) A method~~Method~~ for establishing a light beam according to claim 12, wherein ~~whereby~~ said attenuation control device~~means~~ controls a timing of said luminous intensity peaks by ~~means of~~ a lamp driver control signal.

14. (currently amended) A method~~Method~~ for establishing a light beam according to claim 12, wherein ~~whereby~~ said attenuation control device~~means~~ controls a magnitude of said luminous intensity peaks[[)]] by ~~means of~~ a lamp driver control signal.

15. (currently amended) A method~~Method~~ for establishing a light beam according to claim 10, wherein ~~whereby~~ said attenuation control device~~means~~ receives a lamp driver reference signal comprising information on properties of said luminous intensity peaks.

16. (currently amended) A method~~Method~~ for establishing a light beam according to claim 15, whererin ~~whereby~~ said attenuation control device~~means~~ controls which of said at least two different levels of attenuation that is applied to said light beam by ~~means of~~ said attenuation control signal at least partly on the basis of said lamp driver reference signal.

17. (currently amended) A method~~Method~~ for establishing a light beam according to claim 14, wherein ~~whereby~~ said attenuation control device~~means~~ receives an attenuation reference signal comprising information on properties of said variable attenuation device~~means~~.

18. (currently amended) A method~~Method~~ for establishing a light beam according to claim 17, wherein ~~whereby~~ said attenuation control device~~means~~ controls properties of said luminous

intensity peaks by ~~means of~~ said lamp driver control signal at least partly on the basis of said attenuation reference signal.

19. (currently amended) A method~~Method~~ for establishing a light beam according to claim 13, wherein ~~whereby~~ said attenuation control device~~means~~ receives a light beam reference signal derived from an intensity measuring device adapted to measure the intensity of the light beam.

20. (currently amended) A method~~Method~~ for establishing a light beam according to claim 19, wherein ~~whereby~~ said attenuation control device~~means~~ receives a constant light beam reference signal derived from an intensity measuring device adapted to measure the intensity of said substantially constant intensity light beam.

21. (currently amended) A method~~Method~~ for establishing a light beam according to claim 20, wherein ~~whereby~~ said attenuation control device~~means~~ controls properties of said luminous intensity peaks by ~~means of~~ said lamp driver control signal at least partly on the basis of said light beam reference signal, said constant light beam reference signal or a combination thereof.

22. (currently amended) A method~~Method~~ for establishing a light beam according to claim 20, wherein ~~whereby~~ said attenuation control device~~means~~ controls which of said at least two

different levels of attenuation that is applied to said light beam by ~~means of~~ said attenuation control signal at least partly on the basis of said light beam reference signal, said constant light beam reference signal or a combination thereof.

23. (currently amended) A method~~Method~~ for establishing a light beam according to claim 12, wherein ~~whereby~~ said attenuation control device~~means~~ controls said variable attenuation device~~means~~, said lamp driver or both at least partly on a basis of predefined settings.

24. (currently amended) A method~~Method~~ for establishing a light beam according to claim 12, wherein ~~whereby~~ said attenuation control device~~means~~ continuously controls said variable attenuation device~~means~~, said lamp driver, or both.

25. (currently amended) A method~~Method~~ for establishing a light beam according to claim 10, wherein ~~whereby~~ said attenuation control device~~means~~ establishes a synchronization between a timing of the application of said first and further levels of attenuation and the timing of said luminous intensity peaks.

26. (currently amended) A method~~Method~~ for establishing a light beam according to claim 15, wherein ~~whereby~~ said variable attenuation device~~means~~ is a multi-level variable attenuation device~~means~~.

27. (currently amended) A method~~Method~~ for establishing a light beam according to claim 26, wherein ~~whereby~~ said multi-level variable attenuation device~~means~~ is capable of applying infinite levels of attenuation to said light beam.

28. (currently amended) A method~~Method~~ for establishing a light beam according to claim 27, wherein ~~whereby~~ said attenuation control device~~means~~ controls which of said infinite levels of attenuation that said multi-level~~multilevel~~ variable attenuation device~~means~~ applies to the light beam at least partly on the basis of a magnitude difference between the intensity peaks and the intensity floor.

29. (currently amended) A method~~Method~~ for establishing a light beam according to claim 28, wherein ~~whereby~~ said attenuation control device~~means~~ regulates which of said infinite levels of attenuation that said multi-level~~multilevel~~ variable attenuation device~~means~~ applies to the light beam at least partly on the basis of feedback from a constant light beam intensity measuring device.

30. (currently amended) A method~~Method~~ for establishing a light beam according to claim 27, wherein ~~whereby~~ said attenuation control device~~means~~ controls which of said infinite levels of attenuation that said multi-level~~multilevel~~ variable attenuation device~~means~~ applies to the light beam at least partly on the basis of user input.

31. (currently amended) A method~~Method~~ for establishing a light beam according to claim 27, wherein ~~whereby~~ said attenuation control device~~means~~ controls which of said infinite levels of attenuation that said multi-level~~multilevel~~ variable attenuation device~~means~~ applies to the light beam at least partly on the basis of said lamp driver reference signal.

32. (currently amended) A method~~Method~~ for establishing a light beam according to claim 26, wherein ~~whereby~~ said attenuation control device~~means~~ controls which of said infinite levels of attenuation that said multi-level~~multilevel~~ variable attenuation device~~means~~ applies to the light beam at least partly on the basis of an elapsed time of light source usage.

33. (currently amended) A method~~Method~~ for establishing a light beam according to claim 10, wherein ~~whereby~~ said attenuation control device~~means~~ promotes compensation for light beam property changes caused by prolonged use of said light source.

34. (currently amended) A method~~Method~~ for establishing a light beam according to claim 33, wherein ~~whereby~~ said light beam property changes comprise~~comprises~~ intensity peak magnitude changes.

35-67 (canceled)

68. (currently amended) A method~~Method~~ for establishing a light beam according to claim 1, wherein ~~whereby~~ the luminous intensity of said established light beam with substantially constant luminous intensity is completely constant.

69. (currently amended) A method~~Method~~ for establishing a light beam according to claim 1, wherein ~~whereby~~ the luminous intensity of said established light beam with substantially constant luminous intensity is constant within a tolerance of ±50%.

70. (currently amended) A method~~Method~~ for establishing a light beam according to claim 69, wherein ~~whereby~~ the luminous energy conducted by said established light beam with substantially constant luminous intensity during one peaking period is within±10%of the luminous energy conducted during a nominal period.

71. (currently amended) A method~~Method~~ for establishing a light beam according to claim 1, wherein ~~whereby~~ said light source is a short arc lamp.

72. (currently amended) A method~~Method~~ for establishing a light beam according to claim 12, wherein ~~whereby~~ said lamp driver establishes an alternating current with current peaks for driving said light source.

73. (currently amended) A method~~Method~~ for establishing a light beam according to claim 12, wherein ~~whereby~~ said lamp driver establishes a direct current with current peaks for driving said light source.

74. (currently amended) Use of said~~the~~ method according to claim 1 in a light modulating arrangement used for photolithography.

75. (currently amended) Use of said~~the~~ method according to claim 1 in a light modulating arrangement used for image projection.

76. (currently amended) An apparatus establishing a light beam with substantially constant luminous intensity, comprising:

a light source establishing a light beam[[,]];

a variable attenuation ~~means~~device;~~, and~~

an attenuation control device~~means~~; and

wherein said light beam is moderated to have a substantially constant luminous intensity in accordance with said~~by means of the~~ method set forth in~~according to~~ claim 1.